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EXAMINER

LI, GUANG W

ART UNIT	PAPER NUMBER
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2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

ED

Office Action Summary	Application No.	Applicant(s)	
	10/623,112	LIU, GARY G.	
	Examiner	Art Unit	
	Guang Li	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June, 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/20/2004, 04/26/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig.3 is inconsistent with the specification. Applicant should rename Confirmation Email Records in Fig.1 to Confirmation Message Records (20); Sender Response Process (29) in Fig. 1 to Sender Response Processor (29) to be consistent with specification. Refers to Fig.3, Error Response arrow should be linked to step 304 instead of step 305. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15-19 and 28-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 15, 17, 28 and 30, claims 15,17,28, and 30 are vague and indefinite because it is unclear what is a trend information. See MPEP § 2173.05(d). It is unclear what is the trend information are to be performed to meet this limitation.

5. Regarding claim(s) 16, 18, 29 and 31, claim 16,18,29 and 31, the phrase "Unrelated email addresses" are vague and indefinite because it is unclear what are unrelated email address. See MPEP § 2173.05(d).

6. Regarding claim(s) 19 and 32, the phrase "time dependent" is unclear because it is unclear what is time dependent in the system. See MPEP § 2173.05(d). It is not clear what is the relationship between a threshold and a time dependent function.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim(s) 1-3, 5-6,8-10, 20-22, and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by McCormick (US Patent 6,023,723).

9. Regarding Claim 1, McCormick recites a method for detecting spam (method of filtering junk e-mails in Abstract line 1) in a messaging system (system for filtering electronic mail in Column 8 line 1) comprising: generating a white list (see guest list Fig 1, col.2 lines 31-33 and col. 2 lines 48-50) of confirmed message senders (Automatic discard filter flitting out Spammer in Fig. 1), each of said confirmed message senders having been confirmed as being able to receive messages; sharing the white list (Master list in the central location see Fig 1 and Abstract) among a plurality of spam filters (Delta from all other users see Fig1 element 26) in the messaging system ; using the white list (Guest list Fig 1 element 14) at a given one of the plurality of spam filters to determine if a sender of a received message has been previously confirmed (Automatic Filter check the sender information see Fig.1 element 12), and if so, forwarding the received message to a recipient without separately confirming the sender (Guest incoming email forward email to Inbox Folder see Fig.1).

10. Regarding Claim 2, McCormick recites claim 1 wherein the messaging system is an email system (System filtering junk email see Abstract line1).

11. Regarding Claim 3, McCormick recites claim 1 wherein the white list is shared with at least two spam filters (Address Filter server share with other users see Fig.1 element 26).

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12. Regarding Claim 5, McCormick recites claim 1 wherein sharing includes publishing the white list at a central location (central station with address filter server and data from server see Fig. 1 element 46 and col. 8 lines 33-37).

13. Regarding Claim 6, McCormick recites claim 1 wherein using the white list includes checking the white list (Data from server update to automatic discard filter see Fig 1 element 24) maintained at a central location (Master database in server see col.8 lines 41-42).

14. Regarding Claim 8, McCormick recites a method for identifying a spam message comprising:

15. Receiving a message at a spam filter (Incoming email at Automatic Discard Filter see Fig. 12 element 12 and col.3 lines 45-51) in a network that includes a plurality of spam filters; Identifying the sender of the message (Current filter list see col.3 lines 48-51); Determining if the sender has been previously confirmed as a valid sender including determining if the sender is included in a list of confirmed senders (Updates (G& W) and Update Automatic Discard filter see Fig.1 and master list is periodically allowing the filter to updated) for any spam filter in the network; and If so, then forwarding the received message to a recipient without separately confirming the sender (Forward email to Inbox see Fig.1 element 18 and col.4 lines 31-33).

16. Regarding Claim 9, McCormick recites claim 8 wherein the message is an email message (system for filtering electronic mail see Column 8 line 2 and abstract).

17. Regarding Claim 10, McCormick recites claim 8 wherein the white list (see guest list Fig 1, col.2 lines 31-33 and col. 2 lines 48-50) is shared with at least two spam filters (Address Filter server share with other users see Fig.1 element 26).

18. Regarding Claim 20, McCormick recites a method for detecting spam in a messaging system comprising: generating a white list (Data Server (46) hosts the master database list in Fig1) of confirmed message senders and maintaining the white list at a data center (Updates master list periodically sent to each of the users allowing filter to be updated see Abstract and Fig.1 element 24): receiving a message at a spam filter (Incoming email automatic discard filter see Fig 1 element 12 and col.3 lines 45-48) in a network that includes a plurality of spam filters (Dual filter see Fig 1 element 12 and 14): verifying with the data center (Master list in the central location see abstract) that the sender of the message is a confirmed message sender, add if so, forwarding the received message to a recipient without separately confirming the sender (Forward email to Inbox see Fig.1 element 18 and col.4 lines 31-33).

19. Regarding Claim 21, McCormick recites the method of claim 20 wherein the message is an email message (System filtering junk email see Abstract line1).

20. Regarding Claim 22, McCormick recites the method of claim 20 further comprising sharing the (white list see guest list Fig 1, col.2 lines 31-33 and col. 2 lines 48-50) with at least two spam filters in the network (Address Filter server share with other users see Fig.1 element 26).

21. Regarding Claim 24, McCormick recites a method for identifying a spam message comprising: Receiving a message at a spam filter (Incoming email at Automatic Discard Filter see Fig. 12 element 12 and col.3 lines 45-51) in a network that includes a plurality of spam filters; Identifying the sender of the message (Current filter list see col.3 lines 48-51); Verifying with a data center (Data from server updates Automatic Discard Filter see col.3 lines 54-59) coupled to a plurality of the spam filters if the sender has been previously confirmed as a valid sender including determining if the sender is included in a list of confirmed senders for any spam filter (Update master database see col.4 lines 49-51) in the network, said list maintained at the data center (Address filter server see Fig 1 element 22); If the sender has been previously confirmed, forwarding the received message to a recipient without separately confirming the sender (Forward email to Inbox see Fig.1 element 18 and col.4 lines 31-33).

22. Regarding Claim 25, McCormick recites the method of claim 24 wherein the message is an email message (electronic mail see abstract).

23. Regarding Claim 26, McCormick recites the method of claim 24 wherein the list is shared with at least two spam filters (Address Filter server share with other users see Fig.1 element 26).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claim(s) 4, 7, 11-14, 23, 27, 33-49 and 53-58 are rejected under 35

U.S.C. 103(a) as being unpatentable over McCormick US 6,023,723 in view of Kirsch

US 6,546,416.

26. McCormick teaches a system and method of filtering junk email that user is provided with or compiles a list of e-mail address which user would not wish to receive to produce a first filter (Automatic Discard Filter). A second filter (Guest List Filter) is provided include names and character strings, which the user wishes to receive. The first filter contains a current filter list comprising of spammer emails. The second filter is sort out confirmed and unconfirmed email. Previously confirmed email will be forward to user Inbox folder and unconfirmed email will forward to waiting room folder. The unwanted email (Spammer email) would be transmitted to a central location to be included in a master list. The central location would include a delta filter server (Keep all the spammer list from all the users send over network periodically) and download server (Update the automatic discard list for individual user) for a particular user as well as delta server filter from all other users. The database will update periodically according to McCormick.

27. McCormick fails to teach an email confirmation process for verifying senders and providing a plug in module for automatically adding the pass code associated with the sender at a time for transmission of a message from the sender in the messaging system.

28. Kirsch teaches a filtering method that will automatically issue an email message to source address if the source address is unknown. The original address of an e-mail message is validated to enable blocking for e-mail from spam e-mail sources in response to receipt of a predetermined e-mail message from an unverified source address, a data key encoding information reflective to the email message. The predetermined reply message including an encoded digital signature and means, responsive to receipt of a response message including data derived from signature for validating data.

29. It is desirable to combine SPAM filters that share master SPAM lists with a confirmation (Send message back to user for verification) and authentication process (Pass code). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include confirmation and authentication process in the SPAM system as taught in Kirsch in the spam system of McCormick so as to provide spam system with authentication for security purpose. This will prevent any unauthorized users entering the user mailbox.

30. With respect to claim(s) 4 and 7, McCormick teaches if the response is verified, adding the sender to the white list (McCormick teaches guest list see Fig 1, col.2 lines 31-33 and col. 2 lines 48-50) at the given spam filter and sharing the information with other spam filters (McCormick teaches central station with address filter server and data from server see Fig. 1 element 46 and col. 8 lines 33-37) in the messaging system but fail to teaches if the sender has not been previously confirmed, sending a confirmation to the sender (Kirsch teaches in response to unverified source addresses, a data key

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introduce see abstract), verifying a response from the sender. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include sending confirmation to the sender with spam messaging system.

31. With respect to claim(s) 11-14, McCormick teaches adding the sender to the white list at the given spam filter (accepted list see Fig.1 and col. 12 lines 8-12) and sharing information with other spam filters in network (McCormick teaches master database that shared with other users see abstract), the information including information indicating that the sender has been confirmed (McCormick teaches automatic Update periodically see col.4 lines 49-51). McCormick also teaches where the spam lists maintained at a central location (Data server in central location see Fig1. element 46) and updating (Update in master data server see Fig.1 element 46 and abstract) with other spam filters in master data server expect sending confirmation message back to the user for verification. Kirsch teaches if the sender has not been previously confirmed and if not confirmed (Accept response fails see Fig.1 element 44) sending a confirmation to the sender (In response to unverified source addresses, a data key introduced see abstract), verifying a response from the sender, and if the response is acceptable. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a spam system that is able to send confirmation message back to user for verification. Once sender address been verified, the sender address will add to the master database and store in a central location which other users will be accessible.

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32. With respect to claim(s) 23 and 27, McCormick teaches adding to the white list a name identifying the sender and sharing information (add to Accept list and sharing data server (24) with other users see col.3 lines 57-59) identifying the sender as being confirmed with other spam filters in network (Master list in the central location include updated spammer lists in other spam filters see col. 8 lines 33-38) expect determining if the sender has not been previously confirmed, and if not confirmed then sending from the data center a confirmation to the sender (Kirsch teaches in response to unverified source message see col.3 lines 43-51), verifying a response received at the data sender, and if the response is acceptable (Kirsch teaches Accept list in Fig.1 element 24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include automatic response determine which the sender is spammer or not. If user received response will adding a name identifying the sender to the list maintained at the data center (database server location (46) see Fig.1).

33. With respect to claim 33-38, McCormick teaches a method for email filtering spam (Electronic email system see abstract) in a messaging system comprising: sharing information (shared master database server see Fig.1 element 46) indicating that the message sender can receive among a plurality of spam filters in the messaging system; allowing access by each of the spam filters (Download server in Col.3 lines 57-59) in the messaging system to the information; using said information at a given one of the plurality of spam filters to determine if a message should be allowed without separately determining whether the message sender can receive (Bypass the automatic discard filter without confirmation send to user see col.4 lines 27-33) at the a first

(Automatic Discard filter as first filter phase in Fig .1 element 12) and second (Guess list filter) filters expect confirming that a message sender can receive. Kirsch teaches in response to unverified source message (col.3 lines 43-51). It would have been one of ordinary skill in the art at the time the invention was made to include the spam system a have the ability to send back to user for spam verification and share master spam list with other users.

34. With respect to claim 39-43, McCormick teaches the information is maintained in a list (Guest list see Fig.1 and Fig.3) of confirmed senders is maintained by a datacenter (lists periodically in the central database see col.4 lines 49-51) that shared lists with other spam filters (Master list shared with other user spam filters see Fig.1 element 22 and 24) in the messaging system. McCormick also teaches comprising maintaining a copy of the list (Update (G& W) into Automatic Discard Filter see Fig.1) at a plurality of spam filters in the messaging system expect sending confirmation message back to user as disclosed in Kirsch. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include sending confirmation message to unconfirmed user for verification purpose. After the unconfirmed user verified, either the user updated master database or discard the message.

35. With respect to claim(s) 44 -49, McCormick teaches show sharing information indicating that message sender can received among a plurality of spam filters in the messaging system and determine if a message should be allowed without separately determining where the message sender can received expect the security with the system. Kirsch teaches a database operable to provide a determination of sender is

identified in said database through authentication computer system. For issuing a predetermined reply message to the sender including an encoded digital signature and derived data from the predetermined message for validating. Message identified as potential challenge response messages are passed to a process that operates to determine whether the digital signature is valid and whether the cognitive requests are has been response. It would have been obvious to one of ordinary skill in the art at the time the invention to combine the spam system with authentication for security purpose.

36. With respect to claim(s) 53 and 54, McCormick teaches a method of processing messages at a spam filter in a message system. The accept list will be update the master list in the database server, but fail to teach send confirmation message to unknown users for confirmation. Kirsch teaches a method for identifying the sender by automatically replying to the sender and based upon receiving the packet, one would know whether the sender is a spammer, where if the automated replay does not reach the sender means the sender is a spammer. If sender response will treat as confirmed sender and add on to the accept list with all other accept lists. It will compare the lists with the spam list database to see if the users are spammers or not. This is determined whether the senders have ability to receive reply message. If sender is not confirm sender, a confirm message will send back to user for verification. Once the response message received, the sender will add the accept list (see Fig 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the email filtering system with the method to identifying sender address status to get

better performed. When sender status determined, filtering system either treat the message for confirmed user or spam user.

37. With respect to claim 55, McCormick teaches a method for minimizing spam (Spam filtering system in abstract) in a messaging system, the messaging system including a plurality of spam filters (Automatic Discard Filter and Guest list filter see Fig.1), evaluating a list of confirmed senders (master list in central location); providing a notification to the one spam filter indicating whether the sender's status is confirmed (Periodically and automatically transmitted to address filter in the central location). McCormick fail to teaches receiving a request from one of the spam filters in the messaging system to verify if a sender of a message is a confirmed sender. (Kirsch recites response message (col.8 lines 24-29), a confirmed sender being a sender having a verified capability to receive messages. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the method of minimizing spam system with notification to sender for better verification purposes.

38. With respect to claim 56-58, McCormick teaches a method for minimizing spam (Spam filtering system see abstract) in a messaging system, the messaging system including a plurality of spam filters, the method comprising: receiving a request from one of the spam filters in the messaging system to verify if a sender of a message is a confirmed sender (Guess list have a list of confirmed senders see col.4 line 14), evaluating a list of confirmed senders (Guest list see col.4 line 14-19) ; sharing the sender's status with the other spam filters in the messaging system including adding the sender to the list (Update list periodically col.4 lines 49-51); and providing a notification

to the one spam filter indicating whether the sender's status is confirmed (spam lists are automatic update by the server), but fail to teach a confirmed sender being a sender having a verified capability to receive messages. Kirsch teaches fail to response (See Fig.1 element 42) to confirmation message.(col.8 lines 24-29). It would be confirming the sender including providing a notification to the sender and upon receipt of a confirmation from the sender and identifying whether the sender is spam or not(Fig.3 element 66) It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine response message to the sender and updated and shared master database for minimizing spam in a messaging system.

39. Claim(s) 15-19, 28-32 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick (US 6,023,723) in view of Earnest (US 2002/0184315 A1).

40. Regarding claim(s) 15-19, McCormick teaches a method for detecting a spammer in a network that includes a plurality of spam filters: collecting information relating to sender from a plurality of the spam filters, but fail to teaches determining a trend in the collected information and identify a spammer based on the trend. Earnest teaches determining a spammer based on the trend of information. Spam is determined when an address is retrieved from the end of the array has not been reached the age of the address is determined based upon a seconds threshold (132). It is depending on the number of messages send to sender and then determining the threshold ¶[0016] It would have been obvious to one having ordinary skill in the art at the time the invention

was made for spam filtering system to include determining a spammer based on the a trend of information for redundancy purpose.

41. Regarding claim(s) 28-32, McCormick teaches a method for detecting a spammer in a network collecting information adding the senders to a list of confirmed spammers maintained by the data center. The automatic discard filter is a collective term consisting of a modified discard filter for filtering message. The automatic discard filter would include a copy of master list comprising a list of active e-mail address against the incoming messages. McCormick fails to teach spam system can identify a spammer based on a trend of information as number of messages sent by sender to unrelated email addresses. Earnest teaches determining a spammer based on the trend of information. Spam is determined when an address is retrieved from the end of the array has not been reached the age of the address is determined based upon a seconds threshold (132). It is time dependent when the message is older than the threshold, then the recorded is mark expired ¶[0018]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine with sharing spam system in a central location that includes all the lists of users (White List, Black List and unconfirmed list) with collecting information on the number of messages a sender sent Based on the collection information, email spam system is able to detect whether the sender is spammer or not.

42. Regarding claim(s) 50-52, McCormick et al. teaches a method of detecting a spammer based on determining data except detect spammer basic on the number of messages they send and storage in the master database at the central location. The

spam filter system maintaining the list of recipients and being controlled by a data center (Central location Fig.1 element 46), but fail to disclose how fast a list of recipients grows for a given sender. Earnest discloses detecting the spammer based on how fast the communications to fill the list which indicates the spammer (Information collected from mail files is assimilated into an internal structure array in ¶ [0047]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine spam system that detects the spammers from the filtering system with the number of messages that users send to unrelated address.


43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guang Li whose telephone number is (571) 270-1897. The examiner can normally be reached on Monday-Friday 7:30AM-5:00PM(EST).

44. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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45. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GL


Primary Examiner